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A Brief Summary of Economic Conditions

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SPRING PLANTING is underway. Nine million workers—farm family workers and hired hands—are in the fields. Farmers report they intend to plant less corn and more soybeans this year, less tobacco, fewer peanuts, more spring wheat, more flaxseed, more grain sorghums. * * * In Washington, meanwhile, the agricultural economists watch the business curves for clues to the domestic demand for farm products. They see some signs of improvement this spring. Less satisfactory is the outlook for foreign demand. Little wheat and tobacco are going abroad, limited quantities of pork products, sales of cotton for export have tapered off. * * * Prices of a number of farm products—with the notable exception of hogs—hold at fairly good levels—all things considered—but continue below the purchasing power goals set by Congress. Farm cash income in the first quarter of this year was a little larger than in the corresponding period of 1939. Second quarter also may show some gain.

Commodity Reviews

DEMAND: Downswing halted?

CONDITIONS affecting the domestic demand for farm products continued to deteriorate in March, but at a considerably slower rate than in the two preceding months. The general rate of industrial activity may slacken more, but slowing of the recession in some lines of activity and in prices of several commodities sensitive to changes in underlying economic conditions suggest that the end of the downward movement is about due. However, there are as yet no signs pointing toward rapid recovery thereafter.

In contrast to the sharp contraction in industrial activity during the first quarter of 1940, consumer income apparently averaged almost as high as in the final quarter of 1939. Usually it takes several months of cumulative changes in industrial activity to appreciably affect consumer income. A portion of such income is dependent on corporate earnings of preceding months, pay rolls of persons engaged in the trade and service industries are little affected by temporary fluctuations in industry, and factory working forces are not adjusted as rapidly as output. Unless the decline in industrial activity is more prolonged than is now expected, consumer income and the domestic demand for farm products probably will not be substantially reduced.

Conditions in important industries indicate that the downward trend of industrial activity will be halted this spring. Inventories in the hands of manufacturers and distributors increased by \$1,219,000,000 during the last half of 1939, according to Dun's survey, but this increase was not accompanied by speculative price advances comparable to those preceding the 1937-38 relapse in business. Commodity prices do not appear to be in as vulnerable position as in 1937 and

there appears to be less danger of serious inventory losses, particularly since major wars have in the past been accompanied by increasing world commodity prices. The industrial inventory situation, therefore, does not appear to carry the threat of concerted efforts toward extensive reductions such as those which aggravated the decline in industrial activity during the 1937-38 depression.

P. H. BOLLINGER.

INCOME: Increase

Farmers' cash income from marketings and Government payments was larger in the first quarter of this year than in the corresponding period of 1939. Total for January and February was 1,378 million dollars compared with 1,160 million dollars in the same period of 1939. Preliminary indications are that income from farm marketings in March was larger than in March a year ago whereas Government payments were somewhat smaller.

The increase in January-February income from marketings this year over last was about equally divided as between crops and livestock products. Larger receipts were reported on grains as a group, and on tobacco; slightly smaller receipts from cotton and cottonseed, and fruits; and about the same returns from vegetables. All major branches of the livestock industries shared in the larger income this year—meat animals, dairy products, and poultry and eggs.

Month and year	Income from marketings	Income from Government payments	Total
February:			
1940...	\$537,000,000	\$98,000,000	\$635,000,000
1939...	471,000,000	55,000,000	526,000,000
1938...	483,000,000	31,000,000	514,000,000
January-February:			
1940...	1,154,000,000	224,000,000	1,378,000,000
1939...	1,064,000,000	96,000,000	1,160,000,000
1938...	1,126,000,000	48,000,000	1,174,000,000

PRICES: Decline

Prices of farm products—on average—declined during the month ended March 15, having lost more than the 2-point gain of the preceding month. Substantial losses on eggs and truck crops more than offset gains for cattle, wheat, and lambs. Prices of hogs were slightly lower. The March 15 Index Numbers of Prices Received and Paid by Farmers

[1910-14=100]

Year and month	Prices received	Prices paid	Buying power per unit of farm products ¹
1939			
January.....	94	120	78
February.....	92	120	77
March.....	91	120	76
April.....	89	120	74
May.....	90	120	75
June.....	89	120	74
July.....	89	120	74
August.....	88	119	74
September.....	98	122	80
October.....	97	122	80
November.....	97	122	80
December.....	96	122	79
1940			
January.....	99	122	81
February.....	101	122	83
March.....	97	122	80

¹ Ratio of prices received to prices paid.

Prices of Farm Products

Estimates of average prices received by producers at local farm markets based on reports to the Agricultural Marketing Service. Average of reports covering the United States weighted according to relative importance of district and States.

Product	5-year average, August 1909-July 1914	March average, 1910-14	March 1939	February 1940	March 1940	Parity price, March 1940
Cotton, lb.....	cents.. 12.4	12.4	8.31	10.0	10.0	15.87
Corn, bu.....	do.. 64.2	61.3	44.4	54.7	56.0	82.2
Wheat, bu.....	do.. 88.4	88.9	56.7	84.1	85.0	113.2
Hay, ton.....	dollars.. 11.87	12.06	6.67	8.10	8.22	15.19
Potatoes, bu.....	cents.. 69.7	67.5	64.6	75.2	77.0	86.5
Oats, bu.....	do.. 39.9	40.3	26.9	37.7	38.6	51.1
Soybeans, bu.....	dollars.. (1)	(1)	.73	.96	1.01	---
Peanuts, lb.....	cents.. 4.8	4.8	3.4	3.6	3.6	6.1
Beef cattle, cwt.....	dollars.. 5.21	5.29	7.00	6.84	7.00	6.67
Hogs, cwt.....	do.. 7.22	7.41	7.10	4.97	4.87	9.24
Chickens, lb.....	cents.. 11.4	11.4	14.3	12.2	12.8	14.6
Eggs, doz.....	do.. 21.5	19.6	16.0	20.2	15.4	*21.8
Butterfat, lb.....	do.. 26.3	27.1	22.7	29.7	28.4	*35.0
Wool, lb.....	do.. 18.3	18.7	20.0	27.8	27.3	23.4
Veal calves, cwt.....	dollars.. 6.75	6.92	8.69	8.80	8.81	8.64
Lambs, cwt.....	do.. 5.87	6.22	7.43	7.61	8.05	7.51
Horses, each.....	do.. 136.60	138.40	83.00	78.20	78.20	174.80

¹ Prices not available.

¹ Adjusted for seasonality.

index of prices of all farm products combined was 97, compared with 101 a month earlier and with 91 a year earlier.

Prices paid by farmers continue at 122 percent of the 1910-14 average, the same as a month earlier. This compares with 120 percent in March last year. The buying power of farm products in March was 80 percent of the 1910-14 average, compared with 83 in February, and with 76 in March last year. * * * Declines in prices of some groups of farm products during the past month were largely seasonal, in others they represented adjustments from the earlier abnormal advances due to unusual winter weather conditions.

PLANTINGS: Shifts

Farmers the country over have reported they intend to plant about the same aggregate acreage of crops this year as last, but expect to make some important shifts as between crops. Principal changes include (1) a shift from corn to soybeans, hay and pasture in the central and eastern Corn Belt; (2) increased, and probably near-record plantings of sorghums in

the Southern Plains Area where drought last fall prevented normal plantings and growth of winter wheat; (3) increased, but not unusually heavy plantings of spring wheat and flaxseed in the northwest.

Contemplated changes in plantings of other crops, affecting smaller acreages but of importance to the growers concerned, include increases of 11 percent in the acreage of beans; 2 percent in rice and potatoes; 1 percent in oats. Decreases planned include 5 percent reductions in peanuts and cowpeas; 2 percent in sweetpotatoes; 21 percent in tobacco. The Crop Reporting Board explains that these indications of acreage shifts have been adjusted to allow for the usual differences in each State between March plans and final plantings. No report is available on cotton.

United States: Planted Acreages 1929-38 and 1939, and Prospective Plantings for 1940

Crop	Average 1929-38	1939	Indicated 1940	1940 as percent of 1939
	Thousand acres	Thousand acres	Thousand acres	
Corn, all.....	101,758	91,501	87,770	95.9
All spring wheat.....	22,344	17,532	19,425	110.8
Durum.....	3,671	3,220	3,539	109.9
Other spring.....	18,674	14,312	15,886	111.0
Oats.....	39,501	35,512	35,818	100.9
Barley.....	12,655	14,546	14,606	100.4
Flaxseed.....	2,500	2,470	2,836	114.8
Rice.....	925	1,039	1,057	101.7
Grain sorghums, all.....	8,380	9,366	10,309	110.1
Potatoes.....	3,363	3,069	3,130	102.0
Sweetpotatoes and yams.....	860	862	845	98.0
Tobacco.....	1,674	1,942	1,524	78.5
Beans, dry edible.....	1,949	1,744	1,935	111.0
Soybeans ¹	4,756	9,023	10,610	117.6
Cowpeas ¹	2,476	2,923	2,767	94.7
Peanuts ¹	1,872	2,410	2,296	95.3
Tame hay ²	55,808	58,347	59,385	101.8

¹ Grown alone for all purposes. Partly duplicated in hay acreage.

² Acreage for harvest.

EMPLOYMENT: Increase

Farm employment is increasing seasonally. The number of hired hands totaled 1,843,000 persons as of March 1, compared with 1,578,000 on

January 1. Approximately 50,000 fewer hired workers were employed this March 1 compared with last, reflecting the late opening of spring this season. This lag may be picked up in coming months.

Farm employment usually increases through May and June and reaches a peak in early July. The number of hired hands on July 1 last totaled 3,091,000 persons. Employment then declines, but builds up to another peak in early October. The number of hired hands on October 1 last totaled 3,022,000 persons. There is a sharp decrease through November and December. The low point for the year is on January 1.

Increases and decreases in numbers of farm family workers follow a similar pattern. On March 1 the number of family workers totaled 7,230,000 persons, compared with 7,063,000 on January 1, and with 7,377,000 on March 1 last year. The peak for 1939 was 9,443,000 family workers on June 1.

WHEAT: Smaller Supply

A domestic supply of wheat totaling approximately 900 million bushels is indicated for 1940-41. This figure is based on a winter wheat crop indicated as of December 1 last of about 399 million bushels, plus a spring wheat crop tentatively placed at 200 million bushels, plus a carry-over of about 300 million bushels on July 1 next. The total compares with 1,009 million bushels supply in 1939-40, consisting of a crop of 755 million bushels plus a carry-over of 254 million bushels on July 1 last.

Domestic disappearance has been tentatively forecast at about 660 million bushels during the coming season. Shipments to United States possessions may total 3 million bushels. The quantity available for export to foreign countries in 1940-41 and for carry-over on July 1, 1941 would be about 237 million bushels. It is expected that exports in 1940-41 will be small. Under the provisions of the

Agricultural Adjustment Act of 1938 the carry-over goal is 30 percent of a normal year's consumption and exports, or approximately 225 million bushels.

The world carry-over of wheat on July 1 next has been projected at approximately 1.4 billion bushels. This compares with 1.2 billion bushels on July 1 last, and with 900 million bushels average in the 10 years 1929-38. Of the total world carry-over on July 1 next about 300 million bushels will be in the United States, and the remainder—approximately 1.1 billion bushels—as follows: 700 million bushels in Canada, Argentina, and Australia combined; 400 million bushels in European countries.

Wheat prices in the United States are expected to continue to average relatively high compared with prices in other surplus-producing countries, so long as the Government loan and export programs continue, and domestic production is not large. Changes in domestic prices the next few months will depend largely upon weather conditions here and abroad, developments in the foreign political situation, and upon the volume of overseas sales of North American wheat.

COTTON: Supply Reduced

The United States cotton supply situation has improved this season due to increased domestic mill consumption and the larger volume of exports. The rate of domestic consumption and exports so far this season and the outlook for the period April through July indicate a decrease of 2 million or more bales in the United States carry-over of cotton on August 1 next, compared with August 1, 1939.

At this rate the domestic carry-over of American cotton on August 1 next would total less than 11 million bales. Nevertheless, this would be the third largest carry-over on record. It is based upon prospects that domestic consumption and exports this season will exceed 13.5 million running bales.

This figure consists of domestic consumption of more than 7.5 million bales, and exports of about 6 million.

Data on foreign consumption of American cotton are not available, but it is known that consumption has been running unusually low in relation to exports of American cotton. Foreign stocks of American cotton on August 1 next are expected to be about 1 million bales larger than a year earlier.

FEED: Smaller Supply

BAE forecasts that supplies of feed grains will be a little smaller this year than last, provided the growing season is about average and feed grain acreages are about as indicated on March 1. Prospective plantings indicated a reduction of 4 million acres in the corn acreage, slightly larger acreages of oats and barley, and an increase of 1 million acres in grain sorghums. The supply of feed grains per grain-consuming animal unit in 1940-41—on the basis of production assumptions and supplies in the carry-over from last year—will be slightly smaller than in each of the past 3 years, but materially above the average for the period 1928-32.

HOGS: Prices Down

This month is a critical period for hog producers. Hog marketings are increasing seasonally and in unusually large volume. This reflects the large pig crop produced last fall and the unfavorable ratio of hog prices to corn prices in recent months. Slaughter supplies of hogs are expected to continue materially larger than a year earlier during the remainder of the current hog-marketing year—through next September.

Prices of hogs have weakened in the last 3 months, and now average much below prices in the like period of 1939. The question is how much of the current impact of heavy marketings will be offset by a stronger consumer demand this spring and summer than last. The export market promises little: BAE says that the export de-

mand for pork and lard "probably will be no stronger and may be weaker" during this period.

Evidence accumulates meanwhile that the pig crop will be smaller this spring than last. The number and proportion of sows in receipts at leading markets were larger this winter than last. This means that a larger-than-usual proportion of sows bred for spring farrow have been marketed. The 1940 fall pig crop also is likely to be somewhat smaller than the 1939 crop in view of the continuance of unfavorable hog-feed price ratios.

CATTLE: Marketings

BAE looks for increased marketings of grain-fed cattle this year over last to be offset largely by a continued decrease in marketings of breeding stock. Total slaughter supplies will be about the same this year as last, when dressed weight of cattle slaughtered under Federal inspection aggregated 4.8 billion pounds. This was about the same as in 1938, and only little more than in 1937.

The increase in marketings of grain-fed cattle will be most pronounced during the first half of the year, it is stated. It is probable, though, that the increase in marketings of short-fed cattle will be greater than the increase in marketings of long-fed, well-finished cattle during this period.

Cattle numbers are expected to continue upward during the next few years, barring the recurrence of severe droughts. Last year, much of the increase in the total cattle population was in beef cows and heifers. This indicates a larger calf crop this year; eventually, a considerable increase in slaughter supplies of cattle and calves is in prospect.

The most pronounced increase in cattle numbers during the past year was in the North Central States. Total was 31.8 million head in this area as of January 1 last, or about 6 percent more than on January 1, 1939. The largest increase in any one State was in Kansas where cattle numbers on

January 1, 1940 totaled 13 percent more than a year earlier.

LAMBS: Spring Supply

Spring lambs will soon be coming to market in large volume—much larger than in the corresponding months (May and June) last year. The early spring lamb crop in the principal producing States is about the same this year as last, but many more of the early lambs in California and Texas are expected to reach slaughter weight and condition by July 1.

Early lamb prospects are favorable in several of the other western sheep States, but in the early lambing regions of the eastern States the feed and weather conditions have been unfavorable since the first of the year. * * * Marketwise, the prospects are for a stronger consumer demand for lamb and other meats this spring and summer than last.

The situation in producing areas: **California:** Early lamb crop probably not quite so large as the record crop of last year, but condition above average on March 1, and normal development expected in April and May. **Arizona:** Early lambing season about the most favorable ever known. **Texas:** Early lamb crop larger this year than last. **Idaho, Washington, Oregon:** Early lambs have made good progress.

WOOL: Favorable

BAE says that domestic supply conditions continue relatively favorable for the marketing of the 1940 domestic wool clip. Even though imports in February and March may have been relatively large, it is stated, the carry-over in the United States into the new season which begins this month is probably the smallest in recent years. No weakening of the domestic situation is expected through developments in foreign wool markets in the next few months.

Prices have advanced sharply in South America and South Africa since early January, and supplies of good quality wools have been reported as

clearing rapidly. Only small quantities of Australian wool have been released to neutral countries, at prices fixed by the British Government Wool Control. Prices in the United States are considerably higher than at this time last year.

Domestic mill consumption of wool may be smaller this year than last, when consumption of apparel wool exceeded domestic production of shorn and pulled wool by about 190 million pounds. There is little prospect, however, of a large carry-over of wool at the end of the 1940 season, unless imports should be relatively large.

POTATOES: Plantings

Potato growers reported as of March 1 they expect to plant 3,129,900 acres this year. This compares with 3,068,800 acres planted in 1939, and with 3,363,000 acres average in the 10 years 1929-38. Average abandonment would leave about 3,083,000 acres for harvest this year, or about 6 percent less than the average of 3,296,000 acres harvested in 1929-39.

Prospective plantings in the 11 early States were indicated at 423,000 acres, compared with 419,000 acres planted in 1939; in the 7 intermediate States, 287,000 acres compared with 291,000 acres in 1939; in the 30 late States, 2,419,900 acres compared with 2,358,800 acres in 1939. The 30 late States usually have about three-fourths of the total United States potato acreage.

Prices of new stock potatoes have declined from the high figures following the winter freeze; nevertheless, prices were higher this March than last. Supplies of new potatoes are expected to continue relatively small through April. Shipments from north Florida and the lower Rio Grande Valley of Texas are 2 to 3 weeks later than usual.

TRUCK CROPS: Prices High

Market prices of many truck crops declined in March from the relatively high levels of a month earlier, but prices of those severely damaged by

the late January freeze continued high. Supplies of lima beans, snap beans, beets, cucumbers, eggplant, okra, peppers, squash, and tomatoes are small. Plantings of truck crops for spring and early summer harvest in all the southern States and in California were delayed. Heavy marketings of truck crops are forecast for May and June, since the delayed early crops are likely to overlap the marketing season of some of the second early States.

FRUITS: Supply Down

BAE reports that the supply of oranges for marketing during the next 2 or 3 months is approximately one-third less than in the corresponding period of 1939. But that supplies for the summer months beginning about June—largely from the California Valencia crop—will be about as large as they were last summer. Grapefruit are in sharply smaller supply for the remainder of the current season as compared with a year earlier; the supply of lemons is about the same this season as last.

Cold-storage holdings of apples—totaling 14.4 million bushels—were slightly smaller this March 1 than last, reflecting increased domestic consumption during the past winter due to the distribution of apples to persons on relief, better consumer demand this winter than last, and the smaller available supplies of citrus fruits. Prices of western apples in auction markets were slightly higher this March than last.

Prospects for early strawberries improved in March. Marketings from Florida were small, but were expected to increase in late March and to attain volume in April * * * AMS reported reduced prospects for peaches in Ohio, Indiana, Illinois, Missouri, southwestern Michigan, and the extreme northwest portion of Arkansas, but said that trees in these States were not seriously injured by the winter freeze. No appreciable losses were reported in other areas.

DAIRY: Increase

Milk production—increased sharply in recent weeks—is expected to continue at record or near record levels in view of the increased number of cows and fairly ample supplies of feed. Production of dairy products is expected to increase this spring and summer, but price-supporting factors are the better consumer demand than at this time a year ago, and the smaller volume of supplies in cold storage.

AMS forecasts that the production of milk for each person in the population this year will average about as high as in any recent year—about 849 pounds. Factors include the higher prices of dairy products now than a year ago in comparison with prices of hogs, cattle, lambs, and poultry. Milk cows probably will continue to be well fed, it is stated, even though feed grain supplies on farms are not quite so large in comparison with livestock numbers as they were a year ago, and prices of feed grains are higher.

An increase of nearly 2 percent in the number of milk cows on farms is forecast for this year, since the number of heifers to be added to the milking herds is larger than in 1939, and marketings of cows have recently been low. AMS adds that the moderate supply of dairy products in storage and the somewhat increased sales of fluid milk and cream are also helping to hold milk production above last year's output.

EGGS: More of Them

Production of eggs has increased sharply since midwinter, prices have declined, and the feed-egg price ratio once more is unfavorable to producers. Little change is expected in this unfavorable price situation this spring, since the price of feed may not vary much in coming months, and more than the average number of eggs will be required to purchase 100 pounds of laying ration.

Farmers the country over were aver-

aging 15.4 cents a dozen eggs in mid-March compared with 16.0 cents at the same time last year. During the week ended March 23 it required 7.51 dozen eggs to buy 100 pounds of standard poultry ration at Chicago. This compares with 6.28 dozen a year earlier.

The number of layers in farm flocks is declining seasonally, but probably less rapidly than at this time last year. Flocks had been culled rather heavily in January and February, and market receipts of dressed poultry have been unusually large. Lower farm prices of chickens this spring than last reflect the larger market supplies of fresh and frozen poultry.

TURKEYS: Increase

Turkey growers the country over have reported intentions to raise approximately 34.5 million birds this year. This compares with about 33.0 million in 1939 and with 21.8 million average in the preceding 10 years. Production increases have been indicated in all regions of the country except the South Atlantic and Western States.

Fewer poultts will be bought from commercial hatcheries this season, but this will be more than offset by home hatchings. Producers reported 7 percent more turkey hens on hand this February 1 than last. Intended increases in total numbers of turkeys to be raised range from 5 percent in the West North Central States to 11 percent in the East North Central and South Central States.

Producers were favored last season by relatively low prices of feed during the turkey growing period and by improving consumer buying power during the turkey marketing season. This year the spread between feed costs and market prices may be narrower. And, a failure to move profitably the large stocks of turkeys now in cold storage would adversely affect the storage demand for turkeys next fall.

FRANK GEORGE.

After the War—What?

TO visualize some of the problems that will face American agriculture when the current wars end, it is necessary to have some understanding of how these wars are being conducted and their effect on American agriculture during the period of hostilities. The present European war and, to some extent, the war in the Orient have been to an unexampled degree economic in character, involving blockade and counter-blockade and almost complete governmental control of the economies of the belligerents. The policy seems to be to cripple the economy of the opponent as the way to victory.

The United States is not immune to the effects of these economic weapons. The Allied naval blockade has barred our products from the markets of Central Europe. The pooling of the economic and financial resources of the Allies and the centralization of purchases through government commissions have to date caused our farm exports to be smaller than they would have been had the war not broken out.

FROM what we know of the application of government controls and the general wartime commercial policies of the belligerents, the war is not likely to bring about any substantial increase in our agricultural exports during the next year or so, at least. Should the war continue beyond that time it is possible that the Allies—if they are in control of the seas—will find it desirable to obtain a larger proportion of their agricultural supplies from the United States as the most accessible market.

From one standpoint, at least, failure of the war to bring about an immediate increase in our agricultural exports can be looked on as a blessing in disguise, because a sudden war-created increase would be abnormal and temporary and tend to cause an

over-expansion in our agricultural plant such as occurred during the World War, the correction of which we have been struggling with ever since. If we can keep our agricultural export industries in proper adjustment we will not have to make what might prove to be more difficult and more extensive adjustments in the post-war period. Indirectly, of course, those segments of our agriculture that are producing primarily for the domestic market, such as poultry, cattle and sheep raising, dairying, and vegetable production, should benefit from any increase in industrial activity and consumer purchasing power resulting from increased purchases of our industrial products by the belligerents.

AS for post-war developments there are many questions—economic and political—that cannot be answered unless one can forecast the actual duration of the war and the eventual victors. On the other hand, it is possible, without regard to these questions, to point out certain fundamental difficulties that American agriculture will have to face in the post-war period. Basically, it appears likely that both belligerents and neutrals will find it advisable or necessary to continue many of the economic controls established during the war. Such controls are not likely to prove beneficial to American agriculture.

One obvious conclusion is that the continuation of the war for any appreciable time will result in the near exhaustion of the financial resources of both victor and vanquished. The belligerents will be in need of large quantities of both agricultural and industrial products, the production of which will be neglected during the war or which will be needed in the post-war reconstruction but will be confronted with the problem of how to pay for these products. Of especial concern will be the acquisition of

important raw materials such as cotton, wool, and rubber, which are produced only in either limited quantities or not at all in Europe. In short, the end of the war will not solve one of the causes of the war itself—a more equitable distribution of control of the world's raw material resources.

THE United States is an important exporter of certain raw materials and foodstuffs, but the only way in which other countries can pay for our goods in the long run is by transferring gold to us or by selling to us the surplus products of their own industries. We have already acquired most of the world's gold supply because other countries, due to our high tariff barriers, have been unable to sell us a sufficient volume of the surplus products of their own industries to pay for the goods they would like to obtain from us. This has been an important cause of the decline in our agricultural exports, since our practice of liberal lending was discontinued in the late 1920's. If we expect these countries to resume or to expand their purchases of our agricultural products after the present war is over, we will have to consider ways and means of accepting more of their goods in payment.

Another important development of the present war is the dependence of the belligerents—particularly the Allies—on their dominions and colonies for agricultural and raw material supplies. They are also favoring trade with certain other neutrals such as Argentina and other Latin American countries, where they can pay for the needed agricultural products in goods or services, such as shipping and insurance, and thus eliminate the necessity of acquiring foreign ex-

change. This policy seems likely to lead to an expansion in the agriculture of these countries, an expansion which may not be needed after the war. In other words, except for the United States, the major agricultural exporting countries of the world may find themselves in roughly the same position after the present war as the United States was after the World War—with a surplus of agricultural production for which adequate markets cannot be found.

TO sum up, it appears that United States agricultural exports are not likely to benefit materially from the war, that after the war we will face increasing competition from other agricultural exporting countries for a number of years, and that other countries will be faced with the problem of how to pay for needed imports. Such a situation might lead to a growing recognition of the need of a more equitable distribution of the world's raw material resources or more ready access to these raw materials by those countries most in need of them. There is a possibility that international commodity agreements may help to solve this problem. While such agreements concluded in the past have been none too successful, partly because of their failure to take into consideration the interests of consumer or importing countries, it is possible that the present war may so change world opinion as to make possible a philosophy of "give and take," which is a necessary prerequisite for international cooperation.

D. F. CHRISTY,
*Office of Foreign
Agricultural Relations.*

Reduction: Tobacco growers reported as of March 1 they intend to plant 1,524,100 acres of tobacco this spring. This compares with 1,942,200 acres harvested in 1939, and with 1,673,870 acres average for the 10 years 1929-38. The reduction this year compared with last consists chiefly in a sharp curtailment in acreages of flue-cured and burley tobacco. It reflects the large stocks already in existence, restricted foreign demand, and low prices.

Farm Labor in Southeast Missouri

IN January 1939 several hundred former sharecroppers set up camp along the southeastern Missouri highways. They said they had been evicted—that they had no place to go. Their demonstration drew Nationwide attention. It was apparent that these new recruits to the army of farm laborers could look forward to no more than a few weeks' work a year. The rest of the time would find them penniless and shelterless somewhere on the highway. These sharecroppers constituted a serious local problem. Their plight was indicative of a problem national in scope.

A BRIEF analysis of the forces behind the displacements in the four major cotton counties of the area—Dunklin, Mississippi, New Madrid, and Pemiscot—shed light on local conditions and on general trends in similar areas. Estimates revealed that the local labor which is available greatly exceeds the requirements for every month of the year except June, October, and November. To meet the requirements of January (4,940 laborers), February (5,166), March (10,002), April (13,268), and May (18,653), there were available 35,737 family and hired laborers, leaving a surplus for each of these months ranging from 17,084 to 30,797 laborers.

In June and July, the surplus is less pronounced because the total labor requirement advances to 30,667 and 27,854, respectively—although a sizable surplus is evident even during these months. During August and September, the surplus again becomes greater, but is nearly eliminated in October when cotton picking requirements increase the total for the month to 35,523 persons, leaving only 214 extra workers.

These estimates are conservative. They are based on census figures as of the first week in January 1935, which showed 29,687 family laborers and 6,050 day laborers in the area.

January is a slack season of the year and the labor supply was at a minimum when the census was taken. The number of agricultural laborers has increased since 1935. Furthermore, family labor on a farm is utilized to its utmost and performs a share of the work that is not in proportion to its size.

THE southeast Missouri area had already received considerable aid from the Farm Security Administration before this agency's special program of relief was announced several weeks ago. Last year more than 1,300 families received standard rehabilitation loans to enable them to buy farming equipment, food, and clothing. Many other families were getting cash grants during the periods of slack work and greatest hardship.

The new program was prompted to some extent by a survey made by the Missouri Employment Service last fall, which showed that a minimum of 925 families and laborers in the seven southeastern counties had no place to farm for the coming 1940 crop season. Farm Security's rehabilitation rolls already indicated, however, that the "unlocated" families were not the only ones who suffered in southeast Missouri. Hundreds of sharecropper families who had found farms for 1940 needed food, housing, clothing, and equipment. To meet the needs of the insecure population of this rich cotton region, Farm Security representatives worked with a special committee of Missourians set up by Governor Stark to formulate a program of assistance.

FIRST phase of the new program was the making of loans and grants to farm labor, tenant or sharecropper families who could obtain locations with sufficient land for a garden and pasturage for a cow. These cash advances will enable the families to grow a large portion of their own food supply and preserve food for winter

use, thus conserving their cash incomes while bettering their diets, health, and living standards. At the same time an attempt is being made, in cooperation with the land-owners, to improve the housing and sanitary facilities of the families.

The first 200 families who received this aid obtained grants that averaged approximately \$45 each, to cover the cost of garden, canning, and home supplies. To this same group, approximately 40 loans averaging \$60 have been made for the purchase of cows. It is estimated that by the end of March, from 1,200 to 1,500 families will have received aid of this type.

The ultimate purpose of this loan-and-grant program is simply to provide at least a minimum of security. It is hoped that, with enough food to eat and with shelter, the families will achieve some degree of stability. Better diet, fewer expenses, and more satisfactory living conditions will help them balance their precarious lives.

While the standard rehabilitation loan program offers direct aid only to families who are able to rent a family-sized farm, it is of vast significance in the over-all program to aid all farm labor, because it helps to check the slide of tenants and sharecroppers down into the ranks of "day hands." Furthermore, the guidance and technical advice of the rehabilitation supervisors in the area will be made available to the other low-income farmers who need it in developing their small live-at-home units.

"UNLOCATED" farm families, obviously, offer even more serious problems than those who have a place to work this year. To help them, the Government is undertaking a program of building small "labor homes" on scattered tracts of land. Farm families who are unable to find a home elsewhere but who are able to buy or rent a 5- or 10-acre tract of unimproved land will receive loans from the Farm Security Administration for the construction of low-cost farm homes—dwellings whose cost runs to

about \$500. These loans will also cover the expense of clearing the land and purchasing of necessary equipment for the development of "live-at-home" farming. The chief cash income of these families will come from small crop acreages and from cotton chopping and picking. Where the land is obtained at nominal rent under lease, the improvements will revert to the landlord in 10 or more years in lieu of adequate rent.

Farm Security is also considering the establishment of "labor homes" on land owned by the Government, and the financing of small groups of laborers, tenants and croppers in the joint development of unimproved lands. There are numbers of displaced farm families who are unable to make down payments on unimproved land and who need help badly. The possibilities of these programs are still being explored, however, and no action has been taken toward actual development.

Plans have likewise been made for a rapid expansion of Farm Security's standard rehabilitation program in the area. It is expected that 200 to 400 additional families will receive this type of aid this spring. The Farm Security Administration is transferring additional personnel into the area to handle the increase in borrowers.

JUST what the long-run success of these efforts to aid farm labor will be, it is, of course, too soon to estimate. They have been undertaken in response to urgent need and they have been enthusiastically welcomed. Since the demonstrations in January 1939 landlords and laborers together have engaged in numerous conferences on mutual problems, and have come to realize the Nation-wide significance of their local situation. State agencies, too, have taken an active part in the development of the program. The Missouri Employment Service is serving both landlord and laborer in an effort to smooth out the troubles of the area. Governor Stark's committee has taken an active hand in

formulating the present programs.
* * * A start has been made on a program that might well be adopted in many other regions of the country—areas that feel, with Southeast Mis-

souri, the full impact of wage labor upon the old patterns of farming.

PHILIP BROWN,
Farm Security Administration.

“—For the American Farmer”

“THE American market for the American farmer” is a popular slogan which may be variously interpreted. To some, it implies that there is something undesirable about the export market, or that producers of commodities entering international trade are less fortunate than those producing only for domestic markets. Exported or imported products, it is believed, necessarily must sell for less because they come into competition with the output of producers in other countries with lower standards of living and generally lower costs of production.

But the mere fact that a product is sold only in the domestic market, and does not come into competition with exports from competing nations, does not assure satisfactory prices or incomes to farmers. For example, if we compare recent prices of nine leading agricultural commodities which are consumed almost entirely in the domestic markets—and which receive little or no competition from foreign supplies—with prices of nine leading commodities which enter into international trade, we find that both groups average close to 80 percent of parity (see accompanying table). Although the group entering into international trade includes two commodities receiving considerable tariff protection, and other objections can be found to so simple a comparison, it is evident that agricultural products which enjoy an exclusively domestic market are not in much better relative position, on the average, than products

which enter into world competition with products from other surplus-producing nations.

Evidently, therefore, the “farm problem” is hardly one of merely assuring “the American market for the American farmer.” The kind of market encountered by producers of a commodity is one thing; the way in which that market is exploited is another. A “good” market can be turned into a “poor” one by overdoing it.

Prices Received by Farmers for Specified Commodities as Percentages of Parity, March 15, 1939

Commodity	U. S. price received by farmers as percentage of parity of parity price March 15, 1939
Products consumed almost entirely in domestic markets:	Percent
Corn.....	68
Potatoes.....	89
Hay.....	54
Butterfat.....	81
Chickens.....	88
Eggs.....	71
Hogs.....	53
Lambs.....	107
Cattle.....	105
Average.....	80
Products affected by world conditions:	
Wheat.....	75
Rye.....	60
Flaxseed.....	88
Rice.....	61
Cotton.....	63
Cottonseed.....	93
Apples.....	69
Tobacco.....	104
Wool.....	117
Average.....	81

Source: Bureau of Agricultural Economics and Agricultural Marketing Service.

PROPOSALS designed to obtain the advantages of "the American market for the American farmer" may be viewed from the standpoint of two groups of commodities: those which are exported, and those which are imported.

For exported commodities, it is apparent that market prices prevailing in this country must be in line with world prices, after allowing for transportation and marketing costs. This may mean that the portion of a commodity which enters into domestic consumption sells at a price considerably lower than could be obtained for a somewhat smaller quantity sold entirely in this country, i. e., if there were no exportable "surplus." The problem is to separate the domestic and foreign markets with respect to price determination, obtaining a higher effective price in this country and allowing the surplus to enter world markets at competitive prices. Various methods have been proposed for accomplishing this objective, including the "equalization fee plan," export debentures, domestic price fixing, export subsidies, processing taxes with benefit payments, and the currently discussed certificate plan. All of these plans are based on exactly the same principle, the only differences being with respect to the mechanics of operation and the amount of direct Government subsidy involved.

Any administratively feasible plan of this kind can be made to obtain higher prices in the domestic market than the prices at which exports can be disposed of in world markets. But the reduction in domestic consumption resulting from the higher domestic price, and the lower price received for the remainder as a result of increased exports, may more than offset the effect on farm income of the higher price received for the domestically consumed portion of the product. The effect upon total income depends primarily upon certain characteristics of domestic and foreign demand which vary by commodities. As applied to cotton and wheat,

and possibly a few other export products, any administratively feasible plan of this nature can be expected to increase the total income received by producers from domestic and foreign sources combined. For other products, total income would be reduced. Thus, the advisability of attempting to segregate "the American market for the American farmer" by such means depends upon the particular commodity involved and the specific domestic and foreign demand conditions encountered.

OBTAINING "the American market for the American farmer," on the other hand, may be taken to refer to the commodities sold almost entirely in domestic markets, but which encounter competition from imports of the same or substitute products. In this case, the phrase is taken to mean the exclusion or drastic reduction of imports by means of tariffs or other import restrictions. Such action would have two effects: direct and indirect. The direct effects would arise from any increases in the prices of the affected commodities due to the reduction in domestic supplies as a result of the restrictions on imports. The indirect effects would be on the foreign demand for our exported products, and upon the production and prices of industrial products in this country.

OF the total volume of agricultural imports, slightly more than one-half is entirely noncompetitive, in the sense that their elimination would not affect the prices of any American farm products. Commodities in this group include coffee and rubber. Then there is another group consisting of four farm products: sugar, flaxseed, wool, and cattle hides. Wool and cattle hides are byproducts of meat production, and we could not materially increase their production without so adding to the domestic supplies of meat as to seriously affect the prices of meats. Hence, few people would propose the elimination of imports of these two commodities.

We can hardly expect to produce domestically all of the large proportion of our total consumption of sugar which now comes from foreign countries, because of the high costs of production which would be involved and the certain objection of consumers to any such attempt to force production into uneconomic channels. Likewise, we import a considerable part of the flaxseed consumed in this country, and farmers have shown no disposition to produce our entire domestic requirements despite a tariff of 65 cents per bushel. All of these four products—sugar, flaxseed, wool, and hides—already are under the protection of relatively high and effective tariff duties; i. e., producers of these commodities are receiving benefits of “the American market for the American farmer.”

AFTER eliminating the strictly noncompetitive group and the four commodities just discussed, we have left all of the other agricultural imports, which amount to about 24 percent of total imports. It is quite evident, also, that it would be impossible to eliminate entirely imports of many of these commodities by means of any tariffs or import restrictions which consumers in this country would be willing to tolerate.

But even if all of these imports could be eliminated, it is doubtful that farm income could be increased by as much as 5 percent. In the first place, although the quantities of imports stated in terms of pounds or bushels may seem large absolutely, for many commodities they are quite small relative to total domestic consumption, and their elimination would produce only minor effects on prices as well as farm income. But even in those cases in which the price effect would be greater the effects on incomes received by domestic producers would not be correspondingly large, since consumers would buy less at the higher prices. If domestic demand had what is called “unit elasticity,” a not unreasonable assumption for use as a general guide, consumers would

continue to pay about the same total amount of money for the commodity, and the incomes of producers in the United States would be increased only by the amount formerly paid to foreign suppliers for the imported commodities. The value of agricultural imports of this class represents a rather small proportion of total farm income.

OFFSETTING more or less these direct effects on farm income would be indirect effects injurious to both farmers and domestic consumers. Consumers, including farmers, would be getting less for their money spent for these commodities. And farmers know from experience that if agricultural tariffs were raised to the extent necessary to reduce imports as drastically as indicated, the rates on industrial products would be greatly increased also, reducing the means of payment of foreign nations now buying our farm products, and thereby reducing the demand for our exports. In addition, of course, prices paid by farmers for many industrial commodities would be increased by the higher tariff rates. Thus, whatever small direct benefits farmers as a whole might gain from the elimination of these imports would be partly or more than offset by the indirect losses. For the individual producers of specific commodities, however, the direct benefits might more than offset the indirect disadvantages.

“The American market for the American farmer” is a catch-phrase which has been used for many years by many different interests—for causes both good and bad—but it needs to be examined carefully by farmers before it is accepted as a guide to specific action designed to benefit agriculture. In some cases the application of this general “principle” can be made to yield desirable results for both individual groups of farmers and agriculture as a whole; in others, only harm would result. It is a matter calling for expert marksmanship with a rifle rather than a shotgun approach.

F. L. THOMSEN.

Wood Pulp—Southern Industry

MORE than half of the increase in United States production of wood pulp the last 30 years has been due to the development of the Southern wood pulp industry. Three decades ago there were few pulp mills in the South. The industry expanded as processes for manufacturing Southern pines into wood pulp were developed and more than doubled in the last 5 years as new low-cost production methods were put into use.

Fifty-one pulp mills, consuming approximately 14,000 cords of wood a day in a combined daily output of approximately 9,000 tons of dry pulp, are now operating in the South: Virginia, 10; Louisiana, 6; Alabama, 5; Florida, 5; North Carolina, 5; Tennessee, 4; Mississippi, 3; South Carolina, 3; Texas, 3; Arkansas, 2; Georgia, 2; Maryland, 2; West Virginia, 1. These mills as a rule make kraft paper and other types of paper products. A mill recently opened in Texas makes newsprint.

Southern mills produced nearly 2,800,000 tons of wood pulp in 1939. This figure compares with 1,308,000 tons in 1935, and with approximately 200,000 tons in 1910. The output in Southern mills last year constituted about 40 percent of the total United States production of 7,107,000 tons of wood pulp—the largest output on record. United States production has increased from 5,000,000 tons in 1935. This in turn compares with less than 2,500,000 tons in 1910.

BOTH the total United States production of wood pulp and the South's proportion of the whole are expected to increase as new low-cost pulp production methods are developed. Typical of the continuing progress in this technological field was the recent announcement that "the Forest Products Laboratory has made newsprint experimentally by mixing unbleached semichemical pulp from

Attention has been directed frequently in recent months to the rapidly expanding wood pulp industry in the South. Announcements have been made of new processes for the manufacture of wood pulp from Southern pines, and of the erection of new pulp and paper mills. How and why the industry has expanded, and the prospects for future development, are discussed in the accompanying article.—Ed.

Southern gum trees with groundwood pulp from Southern pines."

Additional stimulus has been given the industry recently by the prospect of diminishing competitive foreign sources of supplies of pulpwood and wood pulp. The principal foreign source of supply is Canada, but accessible forests in that country are becoming increasingly remote from existing mills. The European War may prevent any considerable expansion of Canadian mills, as it already has appreciably curtailed United States imports of pulp from Norway and Sweden.

Manufacturers of cellulose products also are looking toward Southern forests for supplies of raw materials. A recent news dispatch reported that a new rayon pulp mill is about to go into production in Florida. The South also is supplying increasing proportions of the Nation's lumber requirements, shipping large quantities to Central and North Atlantic as well as the Lake and Northeastern States.

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Florida, Georgia, Louisiana, Mississippi, Oklahoma, and Texas. The trees grow quickly, the season is long, the forests are close to consuming markets. (In 1936 the harvest was divided as follows: Lumber, 53 percent; fuel wood, 22; cross ties, poles and piles 7½; farm use, 7½; veneer and cooperage, 6; pulpwood, 4. Estimates are, however, that more than 5,000,000 cords a year are now being cut for the pulp mills.)

"Proper forest management" includes adequate fire protection and usually some type of "selective" as opposed to "clear" cutting, or the taking of all marketable trees at a fell swoop. In the last 3 decades, 80 percent of the virgin timberlands of the South has been clear cut for sawlogs, poles and piling, and burned over. In spite of this fact, there are today extensive areas of second growth timber—not "full stocking" by any means, but the nucleus of fine future forests. If the same old clear cutting practices previously followed are now repeated with the new second growth that is marketable for pulpwood, there is real danger that some of the new mills may become in a few years "ghost mills" in the midst of denuded forest land.

Factors at present working toward such an unwanted outcome are: (1) The temptation of financially hard-pressed farmers and other forest land owners to cash in on the upswing in demand by clear cutting; (2) the practice of many contractors for the mills of buying timber by the acre and then removing every marketable stick of whatever size. Contractors interested in getting the wood out as cheaply as possible usually are not concerned with the condition of the land or forest resource afterwards.

FEDERAL and State foresters are informing farmers and land owners of the advantage of selective cutting—the selling of trees only as the trees attain a certain size, so that a continuing growth in the forest is assured and likewise a steady income for the owners. They are urging reforestation of cut-over areas. Some mill owners are joining in this work, using their own forest lands as demonstration areas. Better distribution of new mills with regard to the forest resources is also being advocated by many interested Southerners.

ALAN MACDONALD,
Forest Service.

Farm Income From Potatoes¹

DURING the period 1910–39 cash farm income from the sale of potatoes has varied widely from year to year. As shown in the accompanying table, cash income fluctuated around an average of about 140 million dollars during the period 1910–15 but rose sharply during the World War years to a record high level of 398 million dollars in 1920. From 1921 to 1930 cash income from potatoes fluctuated from year to year around a relatively high average of about 228

million dollars and reflected a comparatively stable level of general demand conditions.

In 1931 and 1932, however, income from potatoes declined sharply, under the influence of declining consumer purchasing power, reaching a record low point of 90 million dollars in 1932. Except for 1935 and 1938, cash income since 1933 has been higher than the pre-World War average.

AN analysis of the annual changes in cash income from potatoes indicates that two factors have had important influence. The first is variation in the quantity of potatoes sold or available for sale, and the second is

¹ Basic data for estimates of income from potatoes furnished by Agricultural Marketing Service. Economic analysis prepared by Gustave Burmeister for the Farm Income Committee, Bureau of Agricultural Economics.

variation in the level of purchasing power of consumers. Since 1910 the demand for potatoes has been inelastic; that is, large quantities sold or available for sale tended to result in lower cash income to producers than did small quantities. Also, comparatively low levels of consumer purchasing power tended to result in lower cash income from potatoes than did high levels of purchasing power.

These two factors have operated largely through their effects on prices for potatoes. Large supplies available for sale, as in 1928, 1935, and 1938, tended to depress potato prices. An illustration of the effect of low consumer purchasing power on income from potatoes occurred in 1932. The slightly less-than-average quantity sold or available for sale in that year returned the smallest cash income from potatoes on record. In the previous year, 1931, and in the following year, 1933, practically the same quantity of potatoes was sold as in 1932, but in both years consumer purchasing power was higher and cash income from potatoes much higher.

IN MOST of the years since 1910 the quantity of potatoes sold during the calendar year has been between 200 and 260 million bushels. In measuring the changes in income from potatoes due to changes in the quantities sold, as shown in the upper half of the accompanying chart, income from potatoes has been adjusted for changes in the income of industrial workers. The bars in the chart show the most probable income from sales of various quantities of potatoes when the level of the income of industrial workers is equal to the 1924-29 average.

With income of industrial workers at the 1924-29 level, sales of about 200 million bushels would normally result in income from potatoes of about 375 million dollars. As sales increase, the income from potatoes declines, and with the sales at 260 million bushels the cash income would

amount to only about 175 million dollars, or 200 million dollars less than when sales are only 200 million bushels.

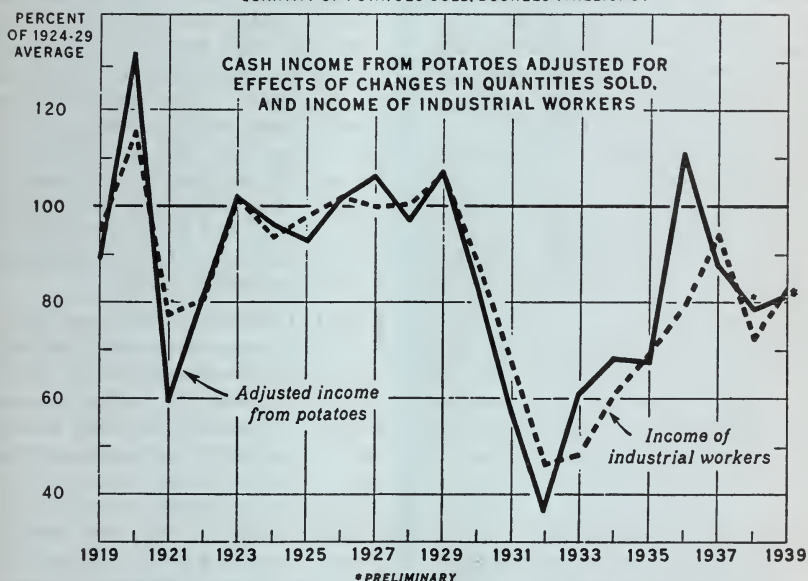
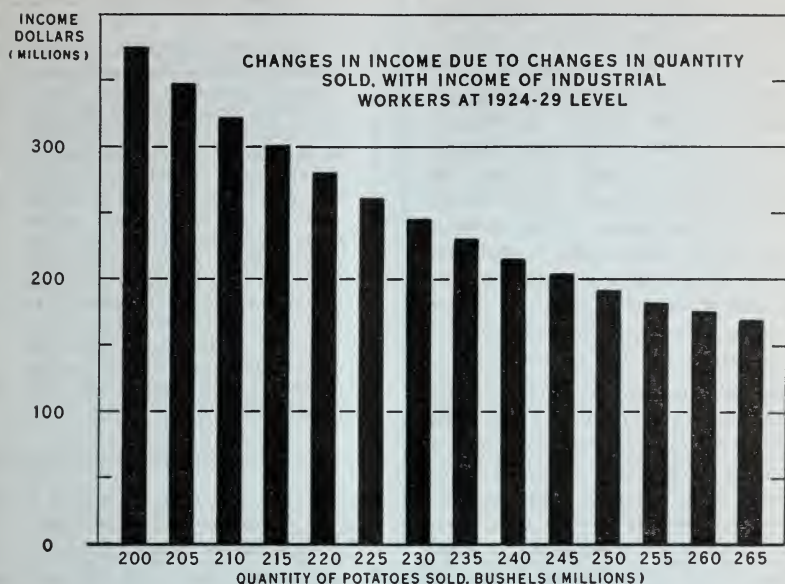
In the lower half of the accompanying chart, cash income from potatoes for the various years has been adjusted to remove the effects of changes in quantities sold. Thus adjusted, income from potatoes has then been compared with the index of income of industrial workers. It will be seen that, with a crop of given size, cash income from potatoes varies directly with changes in the level of income of industrial workers. That is, when the income of industrial workers is above average, the income from the sale of a given quantity of potatoes is usually also above average, and vice versa.

The combined effect of changes in quantities sold and in the purchasing power of consumers, as measured by the income of industrial workers, has largely accounted for the marked variations in income from potatoes since 1910. For example, in 1920, when a relatively small quantity of potatoes

United States: Cash Income, Value of Home Consumption, and Gross Income From Potatoes, 1910-39

Year	Cash income from sales of potatoes	Value of potatoes used for home consumption	Gross income from potatoes
	<i>Million dollars</i>	<i>Million dollars</i>	<i>Million dollars</i>
1910.....	125	44	169
1911.....	142	49	191
1912.....	176	57	233
1913.....	134	46	180
1914.....	144	47	191
1915.....	119	38	157
1916.....	194	64	258
1917.....	360	117	477
1918.....	269	90	359
1919.....	288	93	381
1920.....	398	125	523
1921.....	210	70	280
1922.....	192	63	255
1923.....	206	65	271
1924.....	189	56	245
1925.....	239	69	308
1926.....	338	97	435
1927.....	258	78	336
1928.....	178	54	232
1929.....	228	71	299
1930.....	244	77	321
1931.....	137	45	182
1932.....	90	34	124
1933.....	145	48	193
1934.....	142	45	187
1935.....	112	38	150
1936.....	230	60	290
1937.....	184	49	233
1938.....	128	39	167
1939.....	157	-----	-----

**CHANGES IN CASH FARM INCOME FROM POTATOES RELATED TO
CHANGES IN QUANTITIES SOLD AND TO CHANGES IN INCOME
OF INDUSTRIAL WORKERS, UNITED STATES, 1919-39**



was sold and the incomes of industrial workers were the highest on record, the income from potatoes totaled 398 million dollars, the highest for any year since 1910. In 1938 the total quantity of potatoes sold was the largest on record, consumer income

was relatively low, and the cash income from potatoes totaling 128 million dollars was the smallest since 1935 and the fifth smallest on record.

O. C. STINE,
Chairman, Income Committee.

The Cold Storage Egg

THE cold-storage egg industry was developed originally—in the 1890's—as a device for making available to consumers an adequate supply of eggs the year round. It was intended to reduce the seasonal fluctuations in supply by carrying over the surplus of eggs produced in spring and summer to supplement the reduced production of fresh eggs in fall and winter. It accomplished this result, and was probably a principal factor operating to expand the poultry and egg industry in this country.

The cold-storage egg industry expanded rapidly. It was not long until some 11 million cases of shell eggs a year were going into the storage warehouses. This quantity was approximately 10 percent of the total production of eggs. Techniques for retarding the deterioration of quality of eggs in storage were developed from time to time. The gap between the quality of fresh and cold storage eggs was steadily narrowed. Cold storage egg legislation enacted in the early days of the industry went virtually into the discard.

Improvement in the quality of storage eggs has been an asset from the standpoint of the housewife and the manufacturer of food products in which eggs are used. And yet the quantity of shell eggs going into cold storage has declined in the last 10 years. Only about 6 million cases of shell eggs are now stored annually, as compared with 11 million cases as recently as 1930.

TWO factors responsible for the reduction in the storing of shell eggs have been the lengthening of the season of egg production, and the expansion of the frozen egg industry. During the last 10 years the production of fresh eggs during fall and winter has increased rapidly, and the seasonal variation in prices of eggs has shown a corresponding flattening. More con-

The storing of eggs is another industry which has undergone marked change in recent years. Formerly, practically all the eggs put into cold storage were stored in the shell. Now about half of all the eggs stored are broken out of the shell, frozen as whole eggs or as whites and yolks separately, and stored in 30-pound cans. As the production of frozen eggs has increased, the storing of eggs in the shell has declined. Another factor contributing to the decline in shell egg storage has been the lengthening of the season of egg production.—Ed.

sumers now are able to afford fresh eggs in November and December.

The practice of breaking and freezing eggs was begun by egg packers nearly 40 years ago in an effort to salvage eggs which could not readily be sold in the fresh markets nor stored in the shell. Food manufacturers bought these frozen products, and as the commercial food industries expanded the egg-freezing business increased. Better qualities of eggs were being frozen, and freezing operations became heaviest in the spring season of flush production of eggs.

PRODUCTION of frozen-egg products increased more than 200 percent during the decade of the 1920's, to approximately 155 million pounds in 1929. Production declined during the depression but then increased to a peak of 225 million pounds in 1937. The output was reduced sharply to 133 million pounds in 1938, but was increased again to a total of 198 million pounds last year. Imports of frozen-egg products declined from about 16 million pounds 20 years ago to less than 1 million pounds now.

Most of the egg-breaking and freezing plants are located in the Mississippi and Ohio River valleys. Additional plants are located in large cen-

ters of population on both the Atlantic and Pacific Coasts. In 1937 the States of Missouri, Illinois, Kansas, and Texas led in total volume of frozen-egg production. The frozen products are sold principally to large food manufacturers—mayonnaise and macaroni makers, bakers, and confectioners.

THE frozen-egg industry has been characterized by alternate periods of surplus production during the last 3 years. Another problem is an excess quantity of frozen albumen which acts as a depressing influence on the price level of both albumen and frozen yolks. During 1939, for example, there was a monthly average of approximately 7.5 million pounds more albumen in storage than there should have been in a proper relationship with the quantity of yolks.

Since albumen is the product chiefly in surplus, prices for frozen albumen are usually at low levels. For producers of frozen-egg products, therefore, to dispose of their output at a profitable price, the selling price of yolks must be held at a rather high level, and this in turn tends to restrict the consumption of frozen yolks.

The industry has been aware of this condition for several years and many attempts have been made to devise new uses for albumen for food as well as for industrial purposes. Recently the United States Department of Agriculture authorized its Western Research Laboratory at Berkeley, Calif., to carry on research aimed at finding new nonfood uses for all poultry products, which of course includes albumen.

United States: Production of Frozen Eggs, 1921-39 ¹

Year	Total frozen-egg products	Shell-egg equivalent
	<i>Million pounds</i>	<i>Million cases</i>
1921.....	46	1.3
1922.....	49	1.4
1923.....	71	2.0
1924.....	57	1.6
1925.....	79	2.3
1926.....	92	2.6
1927.....	129	3.7
1928.....	148	4.2
1929.....	155	4.4
1930.....	185	5.3
1931.....	152	4.3
1932.....	138	3.9
1933.....	171	4.9
1934.....	198	5.7
1935.....	206	5.9
1936.....	208	5.9
1937.....	² 225	6.4
1938.....	³ 133	3.8
1939.....	³ 198	5.7

¹ 1921-36 unpublished estimates made by U. S. Tariff Commission, based on original entry into cold storage.

² "Production of Frozen Eggs in the United States in 1937," Poultry Section, Agricultural Adjustment Administration.

³ Estimated.

IF IT is possible to discover new uses which will use significant quantities of albumen, it is believed that the price of frozen albumen might rise and thereby permit a commensurate decrease in the price of frozen yolks. The net result would be a stimulated demand for both albumen and yolk, and an increase in the total output of frozen-egg products. Some distributors also are experimenting in the use of 10- and even 5-pound cans of frozen-egg products to increase sales to small users.

C. C. WARREN,
*Agricultural Adjustment
Administration.*

Record: Wool production in the United States totaled 441,897,000 pounds in 1939, compared with 436,472,000 pounds in 1938. The number of sheep shorn was estimated at 47,394,000 head, compared with 46,609,000 head in 1938. The estimated average local market price of shorn wool in 1939 was 22.3 cents per pound compared with 19.2 cents in 1938. * * * World production of wool in 1939—estimated at about 3.6 billion pounds, exclusive of production in Russia and China—was the largest on record.

Proposed Studies of Livestock Marketing

IN the 1920's Federal and State research agencies were emphasizing marketing studies. In that decade we began to learn something about market demand and about trade practices. Along with the research came many specific proposals for doing something to improve marketing. Some of the results were the expansion and further development of market news services which had been started during the World War period, better grading and inspection of farm products, the regulation of certain farm products trade practices, the organization of many cooperative marketing associations, and the inauguration of outlook programs and economics services by the United States Department of Agriculture and by the State agricultural colleges.

In the 1930's the emphasis of agricultural economics work was more on problems of production adjustment, land use, soil conservation, and farm management. There are signs now of a definite revival of interest in marketing problems. The Bureau of Agricultural Economics is being urged to help the State agricultural colleges study a wide variety of marketing problems which are confronting producers of all sorts of agricultural commodities.

LIVESTOCK producers and marketing specialists in the North Central States have been to the fore in urging a renewed drive to improve the marketing of livestock products. The agricultural colleges in that area have set up a strong committee to organize and coordinate livestock marketing research. Details of the research program have not yet been decided upon, but the committee has presented a general outline of work to the Department and to the directors of the North Central Experiment Stations. These directors have approved in

principle a series of studies to be made by the colleges. They have asked that these studies be supplemented by research by the Bureau of Agricultural Economics.

The committee has proposed a wide variety of studies centering in two general problems fundamental to all agricultural marketing: (1) Efficiency in marketing; (2) the development and maintenance of a desirable degree and type of competition. These are important subjects. A real understanding of these two problems and of their implications to agriculture would go far toward perfecting a marketing system—for livestock and for agriculture as a whole.

MUCH research has dealt with the problem of efficiency in marketing. Usually, however, the studies have been limited to small details—how to operate a given milk plant, whether to pack apples in baskets or boxes, or how to handle and grade eggs on the farm. Much of this research has dealt with the efficiency of marketing functions performed by the farmer and by local marketing agencies. Too little attention has been given the important problems of efficiency of transportation, processing, handling, and selling in the central and terminal wholesale markets, and to the problem of food retailing.

There is need for broader studies to consider the efficiency of the marketing system as a whole and to suggest changes which will reduce the overall cost of the whole process between the time hogs—for example—leave the farm and the time the pork and other hog products are delivered to the ultimate consumer. This involves not only the efficiency of each separate unit in the processing-transporting-marketing chain. It involves an analysis of the number, sizes, types, and locations of such units as are required.

THE extent and kinds of competition in agricultural marketing is a subject which has not yet had enough attention by the agricultural economist. The papers read by Rowe, Hoffman, Nichols, and others at the farm economic meetings in Philadelphia last December indicate the importance of this subject as a basis for sound agricultural policies. So far, most of the work in monopoly and imperfect competition has been mainly either pure fact finding or pure theory. The agricultural economist must find a way of combining the two into a real analysis of the economic and social consequences of present methods of

competition and a consideration of the probable economic and social effects of various policies which might seek to change present competitive methods.

Have large-scale organizations in the meat-packing industry been able to develop greater efficiency in processing and distribution than small concerns? If we are to have further concentration of processing and marketing in the hands of large concerns, what degree and what kinds of regulation may be necessary to protect the farmer and the consuming public? These are likely to be big agricultural issues in the next decade.

FREDERICK V. WAUGH.

EXPORTS, IMPORTS

United States exports of cotton during the first six months of the European War were approximately twice the volume in the corresponding period a year earlier. Exports of pork products were above the low figures of a year ago. Exports of other leading commodities were greatly reduced.

United States imports of most commodities—including sugar, wool, tobacco, hides and skins, and canned beef—were above the quantities in the corresponding period of 1938–39. But there were substantial decreases in imports of flaxseed, cattle, and barley malt.

United States: Exports and Imports of Specified Agricultural Commodities, February 1939 and 1940, and September-February 1938–39 and 1939–40¹

Commodity	Unit	February		September-February	
		1939	1940 preliminary	1938-39	1939-40 preliminary
Exports:					
Pork:		<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>	<i>Thousands</i>
Cured pork ^a	Lb.....	5, 235	6, 417	30, 609	37, 450
Other pork ^a	Lb.....	3, 008	21, 265	19, 169	59, 277
Total pork.....	Lb.....	8, 243	27, 682	49, 778	96, 727
Lard, including neutral.....	Lb.....	24, 483	25, 133	128, 072	141, 529
Wheat, including flour.....	Bu.....	11, 946	3, 816	49, 459	23, 428
Apples, fresh ^a	Bu.....	1, 230	158	9, 336	2, 455
Pears, fresh.....	Lb.....	2, 175	772	129, 260	62, 865
Tobacco, leaf.....	Lb.....	34, 729	17, 737	306, 660	176, 674
Cotton, excluding linters (500 lb.).....	Bale.....	278	788	2, 385	4, 964
Imports:					
Cattle.....	No.....	70	39	334	282
Beef, canned including corned.....	Lb.....	3, 132	6, 517	34, 029	44, 239
Hides and skins ^a	Lb.....	28, 006	32, 149	146, 384	172, 010
Barley malt.....	Lb.....	6, 139	3, 969	44, 651	33, 479
Sugar, cane (2,000 lb.).....	Ton.....	130	261	966	1, 502
Flaxseed.....	Bu.....	2, 248	1, 763	10, 126	5, 451
Tobacco, leaf.....	Lb.....	4, 554	4, 830	28, 066	30, 641
Wool, excluding free in bond for use in carpets, etc.....	Lb.....	5, 465	21, 086	28, 907	98, 279

¹ Corrected to March 26.

² Includes hams, shoulders, bacon, and sides.

³ Includes fresh, frozen, pickled, salted, and canned.

⁴ Includes baskets, boxes and barrels, in terms of bushels.

⁵ Excludes the weight of "other hides and skins" which are reported in pieces only.

Source: Office of Foreign Agricultural Relations. Compiled from official records of the Bureau of Foreign and Domestic Commerce.

Economic Trends Affecting Agriculture

Year and month	Industrial production (1923-25=100) ¹	Income of industrial workers (1924-29=100) ²	Cost of living (1924-29=100) ³	(1910-14=100)				Farm wages	Taxes ⁴
				Wholesale prices of all commodities ⁴	Prices paid by farmers for commodities used in— ⁵				
					Living	Pro-duction	Living and production		
1925.....	104	98	101	151	164	147	157	176	270
1926.....	108	102	102	146	162	146	155	179	271
1927.....	106	100	100	139	159	145	153	179	277
1928.....	111	100	99	141	160	148	155	179	279
1929.....	119	107	99	139	153	147	153	180	281
1930.....	96	88	96	126	148	140	145	167	277
1931.....	81	67	88	107	126	122	124	130	253
1932.....	64	46	79	95	108	107	107	96	219
1933.....	76	48	76	96	109	108	109	85	187
1934.....	79	61	78	109	122	125	123	95	178
1935.....	90	69	80	117	124	126	125	103	180
1936.....	105	80	81	118	122	126	124	111	182
1937.....	110	94	84	126	128	135	130	126	187
1938.....	86	73	82	115	122	124	122	124	186
1939.....	105	783	82	113	120	122	121	124	-----
1939—March.....	98	79	82	112	119	122	120	-----	-----
April.....	92	75	82	111	-----	-----	120	121	-----
May.....	92	75	81	111	-----	-----	120	-----	-----
June.....	98	80	81	110	119	121	120	-----	-----
July.....	101	80	81	110	-----	-----	120	126	-----
August.....	103	83	81	109	-----	-----	119	-----	-----
September.....	111	86	82	115	122	123	122	-----	-----
October.....	121	91	82	116	-----	-----	122	126	-----
November.....	124	93	82	116	-----	-----	122	-----	-----
December.....	128	93	82	116	121	124	122	-----	-----
1940—January.....	119	93	82	116	-----	-----	7 122	119	-----
February.....	7 109	7 89	82	115	-----	-----	7 122	-----	-----
March.....	-----	-----	-----	-----	-----	-----	7 122	-----	-----

Year and month	Index of prices received by farmers (August 1909-July 1914=100)								Ratio of prices received to prices paid
	Grains	Cotton and cotton-seed	Fruits	Truck crops	Meat animals	Dairy products	Chickens and eggs	All groups	
1925.....	157	177	172	153	140	153	163	156	99
1926.....	131	122	138	143	147	152	159	145	94
1927.....	128	128	144	121	140	155	144	139	91
1928.....	130	152	176	159	151	158	153	149	96
1929.....	120	144	141	149	156	157	162	146	95
1930.....	100	102	162	140	133	137	129	126	87
1931.....	63	63	98	117	92	108	100	87	70
1932.....	44	47	82	102	63	83	82	65	61
1933.....	62	64	74	105	60	82	75	70	64
1934.....	93	99	100	103	68	95	89	90	73
1935.....	103	101	91	125	118	108	117	108	86
1936.....	108	100	100	111	121	119	115	114	92
1937.....	126	95	122	123	132	124	111	121	93
1938.....	74	70	73	101	114	109	108	95	78
1939.....	72	73	77	105	110	104	94	93	77
1939—March.....	66	71	81	110	116	100	88	91	76
April.....	67	70	82	95	114	95	87	89	74
May.....	72	72	85	88	112	92	85	90	75
June.....	73	73	93	105	107	94	83	89	74
July.....	66	73	80	99	107	96	89	89	74
August.....	64	71	70	99	101	100	80	88	74
September.....	83	76	73	117	117	107	102	98	80
October.....	77	74	73	128	112	112	108	97	80
November.....	79	75	66	123	107	117	117	97	80
December.....	87	82	65	96	101	118	97	96	79
1940—January.....	90	85	66	117	103	119	91	99	7 81
February.....	91	85	76	168	101	118	98	101	7 83
March.....	92	85	73	128	102	114	83	97	7 80

¹ Federal Reserve Board, adjusted for seasonal variation.

² Adjusted for seasonal variation.

³ Monthly indexes for months not reported by the Bureau of Labor Statistics are interpolated by use of the National Industrial Conference Board cost-of-living reports.

⁴ Bureau of Labor Statistics index with 1926=100, divided by its 1910-14 average of 68.5.

⁵ These indexes are based on retail prices paid by farmers for commodities used in living and production reported quarterly for March, June, September, and December. The indexes for other months are interpolations between the successive quarterly indexes.

⁶ Index of farm real-estate taxes per acre. Base period represents taxes levied in the calendar years 1909-13, payable mostly within the period Aug. 1, 1909-July 31, 1914.

⁷ Preliminary.

Note: The index numbers of industrial production and of industrial workers' income shown above are not comparable in several respects. The base periods are different. The production index includes only mining and manufacturing; the income index also includes transportation. The production index is based on volume only, whereas the income index is affected by wage rates as well as by time worked. There is usually a time lag between changes in volume of production and in workers' income, since output can be increased or decreased to some extent without much change in the number of workers.